



PUBLIC DOCUMENTS
DEPOSITORY ITEM

AUG 29 1985

CLEMSON LIBRARY

Bathhouse Row Adaptive Use Program
The Hale Bathhouse: Technical Report



Digitized by the Internet Archive in 2012 with funding from LYRASIS Members and Sloan Foundation

BATHHOUSE ROW ADAPTIVE USE PROGRAM THE HALE BATHHOUSE: TECHNICAL REPORT 3

HOT SPRINGS NATIONAL PARK Garland County, Arkansas

June 1985



CONTENTS

INTRODUCTION 1

DESCRIPTION 3

HISTORICAL DEVELOPMENT 9

SIGNIFICANCE 25

EXISTING CONDITIONS 27

APPENDIX 32

SELECTED REFERENCES 34

LIST OF PREPARERS/CONSULTANTS 35

PLANS AND FIGURES

- 1. Hale Bathhouse, 1984 4
- 2. Hale Bathhouse West Elevation (HABS Drawing), 1984 5
- 3. Hale Bathhouse South Elevation (HABS Drawing), 1984
- 4. Hale Bathhouse Floor Plans (Second Floor and First Floor), 1985 7
- 5. Hale Bathhouse Floor Plans (Roof and Basement), 1985
- 6. Chart of the Principal Hot Springs, 1860 10
- 7. North End of Bathhouse Row, 1891 11
- 8. Hale Bathhouse after the Civil War, date unknown 12
- 9. "Old Hale" Bathhouse, ca. 1891 12
- 10. Hale Bathhouse, 1892-1893 13
- 11. The Exterior of the Hale during Remodeling, 1914 15
- 12. The Interior of the Hale during Remodeling (Men's Bath Hall), 1914 15
- 13. The Interior of the Hale during Remodeling (Office and Sunroom), 1914 16
- 14. Hale Bathhouse after 1914, date unknown 16
- 15. Hale Bathhouse, between 1915 and 1937 17
- 16. The Hale after Remodeling, 1939-1940
- 17. Hale Bathhouse, after 1940 19
- 18. Old Hale Spring, 1917 22
- 19. Basement Entrance, 1917-1918 23
- 20. Changes in Cooling System, 1942 24
- 21. Hale Bathhouse First and Second Floor Structural Plan, 1984 27

TABLES

- 1. Remodeling and Maintenance 20-21
- 2. Existing Conditions 30-31



INTRODUCTION

The National Park Service is proposing to offer vacant bathhouses within the Bathhouse Row historic district at Hot Springs National Park for adaptive use. The leasing of historic properties was authorized by Congress in 1980 by amending Section 111 of the National Historic Preservation Act. The National Park Service has established procedures for the program in "Leases and Exchanges of Historic Property" (36 CFR 18) and the "Historic Property Leasing Guideline" (NPS-38). Proposed uses that would provide accommodations, facilities, and services to a substantial number of park visitors would be accomplished through concession contracts under the authorities of the Concessions Policy Act of 1965.

The purpose of the adaptive use program at Hot Springs is to preserve the historic bathhouses through compatible use and maintenance of the buildings by private businesses or individuals. The National Park Service also intends that such use will help restore the traditional levels of visitor activity along Bathhouse Row to maintain the historic scene and to contribute to the revitalization of downtown Hot Springs. Additional information on the park, Bathhouse Row, and National Park Service management proposals for the area is contained in the draft General Management Plan/Development Concept Plan which is available at the address below.

This report is number three in a series of seven technical reports (listed below) prepared by the NPS Denver Service Center to provide technical information for use in the development of proposals by prospective lessees or concessioners and in the evaluation of proposals by the National Park Service. The reports describe the Bathhouse Row landscape and structures and provide detailed information on historical development, significance, and present conditions of the landscape and each vacant bathhouse.

Bathhouse Row Adaptive Use Program Technical Report Series

The Bathhouse Row Landscape: Technical Report 1

The Superior Bathhouse: Technical Report 2

The Hale Bathhouse: Technical Report 3

The Maurice Bathhouse: Technical Report 4

The Fordyce Bathhouse: Technical Report 5

The Quapaw Bathhouse: Technical Report 6

The Ozark Bathhouse: Technical Report 7

For additional information on the Bathhouse Row Adaptive Use Program, please contact the following individuals:

Historic Property Leasing Coordinator Southwest Regional Office P.O. Box 728 Santa Fe, New Mexico 87501 (505) 988-6385

Superintendent Hot Springs National Park P.O. Box 1860 Hot Springs, Arkansas 71901-1860 (501) 624-3383

DESCRIPTION

The Hale Bathhouse is a two-story structure with a basement containing 12,000 square feet of space. Originally designed in the Classical Revival style, the Hale Bathhouse was later remodeled in a handsome Spanish Revival style (see figures 1, 2, and 3). The facade is treated with an arcuated series of windows, pilasters with capitals, and a cornice. On both floors the fenestration is used to suggest arcades of piers with capitals. Over the entrance there is a double curved parapet with the name of the bathhouse. On either side of the entrance are small windows barred by handsome wrought-iron grilles. The entrance arcade forms a sun room where guests could relax. An attractive great-hipped roof of red tile crowns the building.

The most prominent interior feature is the sun porch which stretches almost the length of the building (see figure 4). On the first floor is the lobby which has sitting areas on either side and an office behind the reception counter. The south side of the building, that is the front half and the back two-thirds, is made up of the men's dressing room, pack room, cooling room, and a bathing hall skylighted at the north end. The women's side is similar, but substantially smaller. There are stairs on either side of the lobby/office area.

The second floor has additional dressing spaces for both men and women, and cooling rooms and massage areas for each. There are also small lounges for men and women staff; these are adjacent to the stairs.

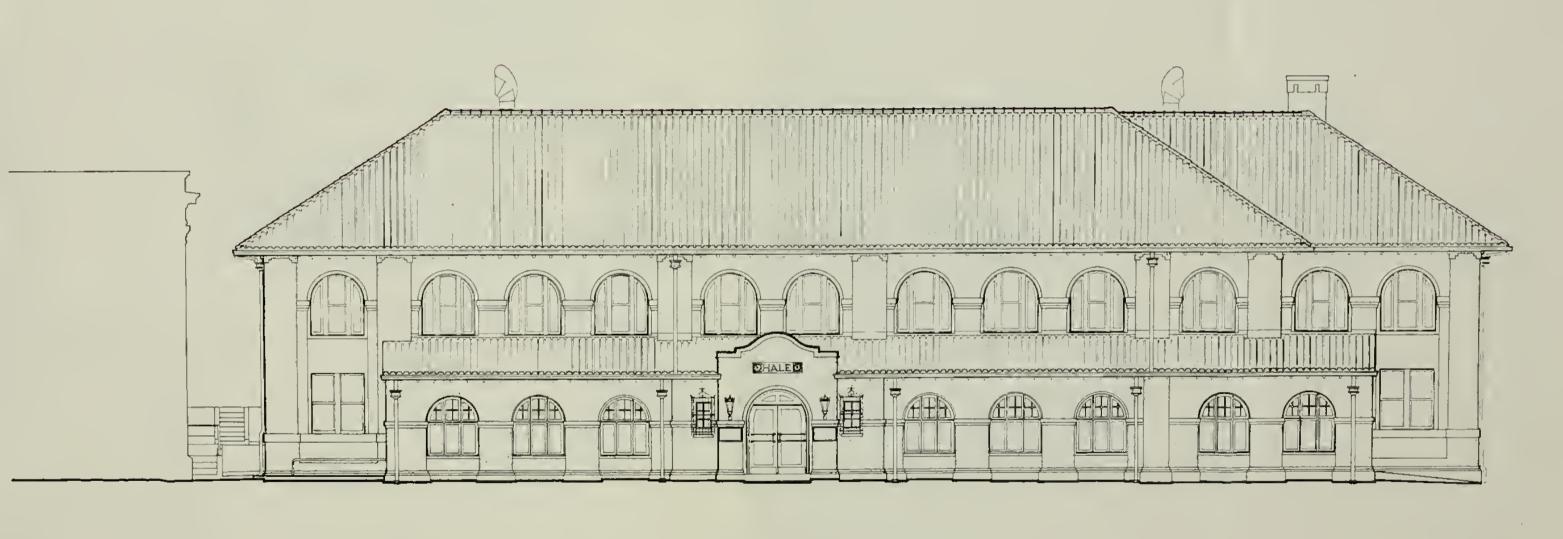
The clay-tile, hipped roof slopes to all four sides (see figure 5). Just north of rear center there is a small "T" shaped area with a metal-framed wireglass skylight situated over the men's bathing hall.

The basement is below grade. It is approximately half as large as the first floor. Storage areas are along the front and on either side. The men and women employees' dressing rooms are on the north end, adjacent to the boiler room. Directly across from the women's dressing room is the display spring. The remainder of the basement contains storage and a large fan.

The Hale is one of the most structurally sound bathhouses. Although its walls are stuccoed brick, the floors are spanned with steel. An interesting technique used in the construction of the Hale was the brick vaulting used in the basement as a form into which the concrete was poured for the floor above. In other words, the original first floor structure and basement ceiling has steel beams with shallow brick vaults between them, held in place by steel tension bars; the whole assembly is covered with a concrete topping. Part of the second floor is constructed of wood framing and the remainder is steel girders and wood floor joists.

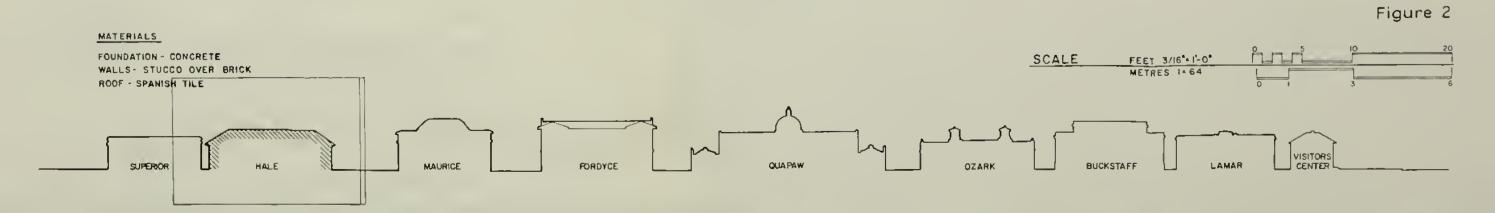


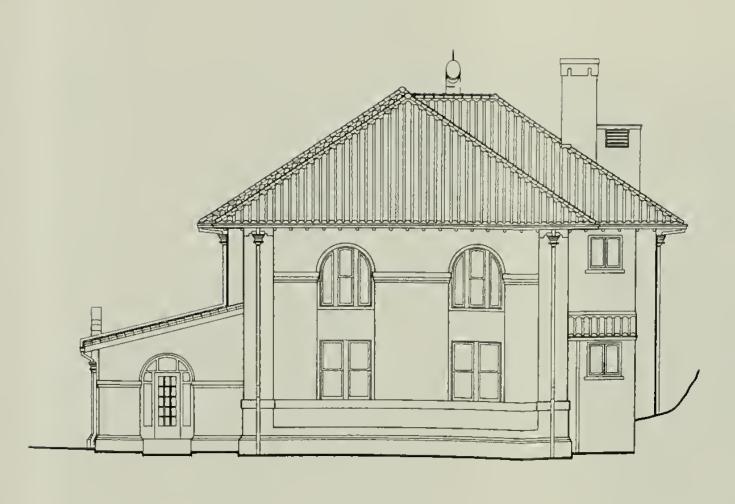
Figure 1. Hale Bathhouse, 1984 (Source: Historic American Buildings Survey)



HALE BATH HOUSE

WEST ELEVATION

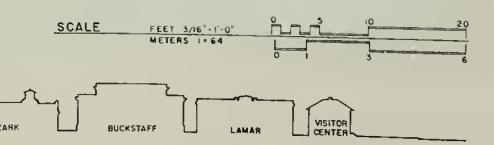




ELEVATION SOUTH

Figure 3

FOUNDATION - CONCRETE WALLS - STUCCO OVER BRICK ROOF - SPANISH TILE



CENTRAL AVENUE

HOT SPRINGS

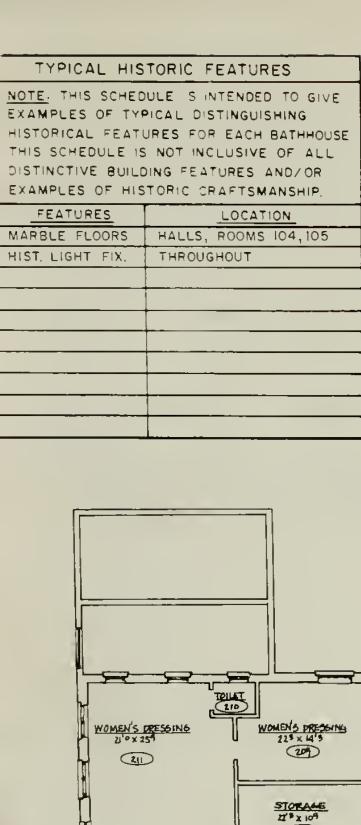
GARLAND COUNTY

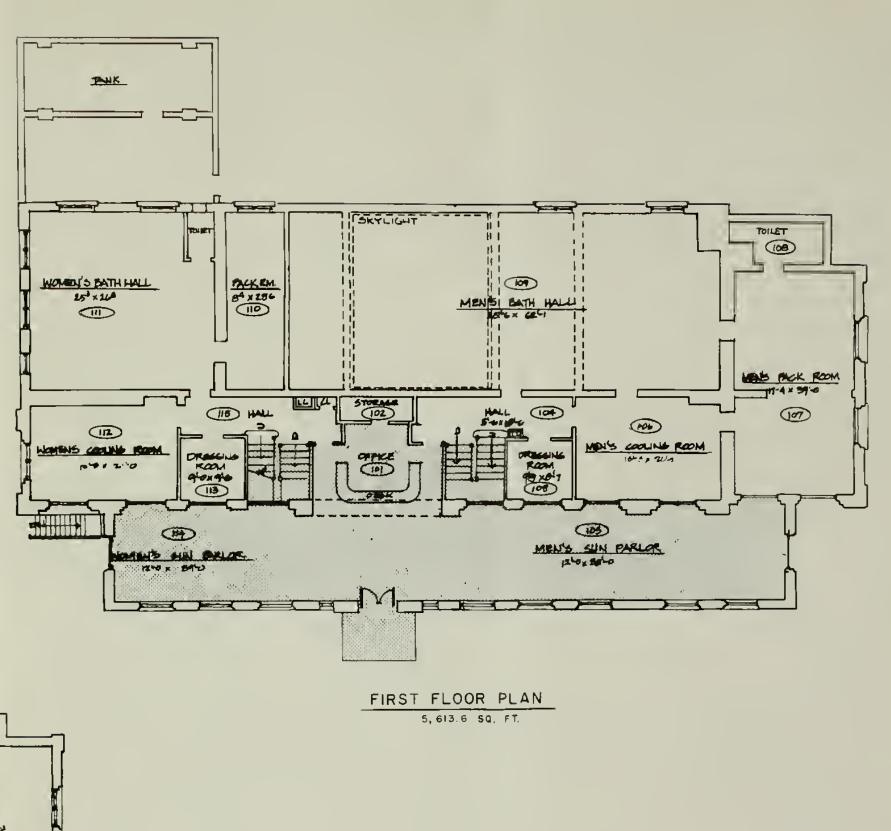
ARKANSAS

ARKANSAS

ARKANSAS

ARKANSAS





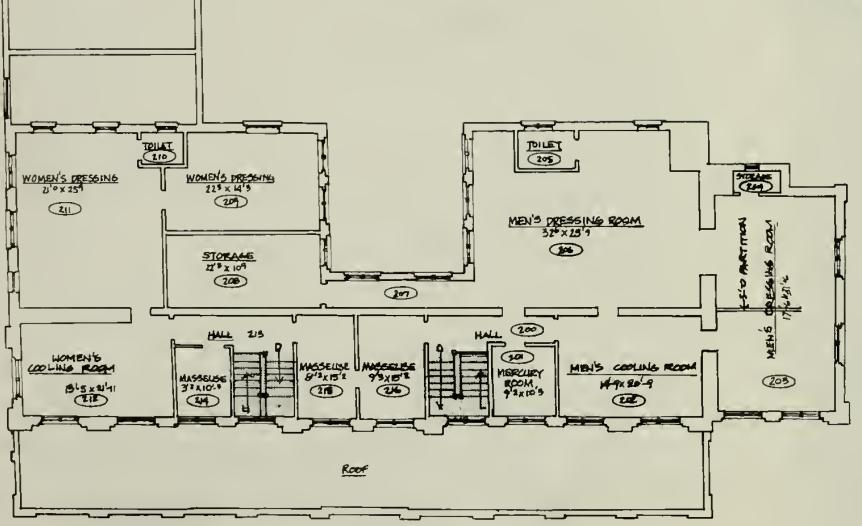


Figure 4

INDICATES DISTINGUISHING HISTORIC INTERIOR SPACE.

SCALE OF FEET

DESIGNED EXISTING UB SHEET NO DRAWN SE/SW TEAM TECH REVIEW THORSON DATE 5/85

TITLE OF SHEET HALE BATHHOUSE FLOOR PLANS

128 40,016

PKG SHEET NO 172 5

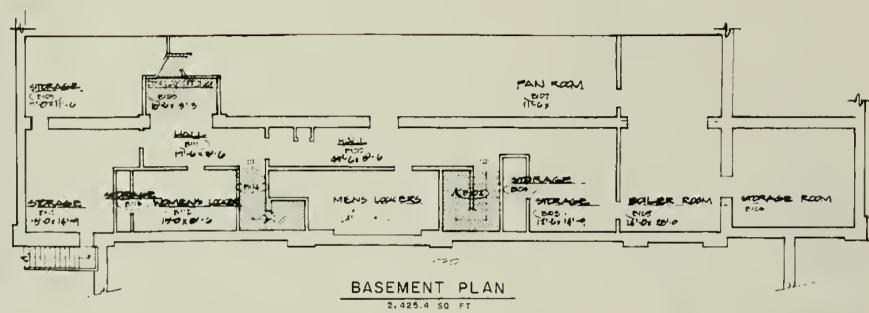
TECHNICAL REPORT #3

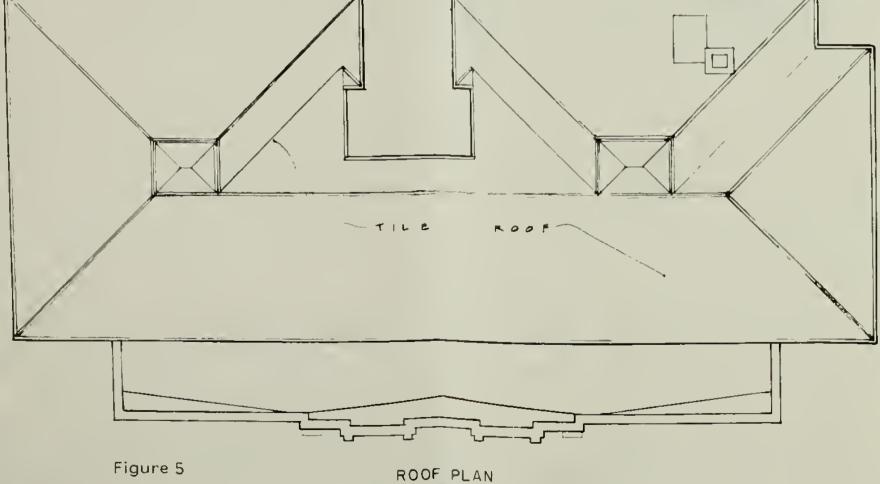
SECOND FLOOR PLAN 3,968 | SQ. FT

C BATA 128/26, 000

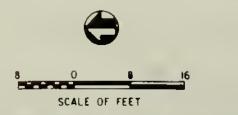
TYPICAL HISTORIC FEATURES NOTE THIS SCHEDULE IS INTENDED TO GIVE EXAMPLES OF TYPICAL DISTINGUISHING HISTORICAL FEATURES FOR EACH BATHHOUSE. THIS SCHEDULE IS NOT INCLUSIVE OF ALL DISTINCTIVE BUILDING FEATURES AND/OR EXAMPLES OF HISTORIC CRAFTSMANSHIP. FEATURES LOCATION BRICK VAULTING BASEMENT CEILING

| FEATURES | LOCATION | | |
|----------------|------------------|--|--|
| BRICK VAULTING | BASEMENT CEILING | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |





INDICATES DISTINGUISHING HISTORIC INTERIOR SPACE.



DESIGNED SUB SHEET NO EXISTING

ORAWN SE/SW TEAM

TECH REVIEW THORSON

DATE 5/85

HALE BATHHOUSE

FLOOR PLANS
TECHNICAL REPORT # 3

DRAWING NO 128 40,016 PKG SHEET NO 172 4

BASIC DATA 128/26,000

HISTORICAL DEVELOPMENT

An early pioneer in the Hot Springs area, John C. Hale, built the first Hale House along Hot Springs Creek in 1841. Within twenty years there were at least three establishments in Hot Springs bearing Hale's name, although none of these appear to have been situated on the lot where the Hale stands today (compare the springs and topography in figures 6 and 7). It is very likely that all these early structures were destroyed by raiders during the Civil War. Following the war, Hale rebuilt his bathhouse near the Alum Spring (figure 8). John Hale died in 1875 and the bathhouse lease was sold or transferred by his heirs. After the Hot Springs Commission settled land claims in the area in 1879, William Nelson built a bathhouse adjacent to and to replace the existing Hale Bathhouse (figure 9). The 1879 frame structure was razed in 1891 and a new building put up on the site the next year by principal owner Colonel Root.

Although the name of the architect is unknown, the structure was said to have cost \$25,000 (figure 10). The 100- by 45-foot three-story and basement structure was built of stone, brick, iron, and wood in 1892-1893. The floors were supported on iron girders and brick arches, and were laid with handsome French tiling and/or marble. The bathing department had tile floors, 26 tubs, marble partitions, and nickel-plated hardware. The tubs were rolled, rimmed, and porcelain lined. The 20-foot-high ceilings provided excellent ventilation. The Hale had two needle and shower baths, one hot room, six cooling rooms, a gymnasium, and 14 dressing rooms on the men's side; the women's department contained eight tubs, one vapor bath, one hot room, two cooling rooms, one needle bath, and six individual dressing rooms. The house also had a subterranean excavation or cave in the tufa bluff directly to the rear of the bathhouse. This cave was used as a sweat room; it was known for some time as the "electric cave."

In 1910 a new policy was adopted by Hot Springs Reservation administrators requiring the bathhouse owners to replace each nineteenth-century building, which were generally wood-frame structures in poor repair, with "an entirely new, sanitary, thoroughly appointed, complete in every detail, and embodying all the improvements and essentials incident to the present standard of the practice of hydrotherapy, as well as sanitation, hygiene, etc., or to remodel and improve his present bathhouse." Following lengthy negotiations between the superintendent and the owners of the Hale, an extensive remodeling of the building was proposed in 1913 and was described as follows by the architect, George R. Mann of Little Rock.

It is proposed to extend the building 20 feet to the South carrying the addition up through full two stories. The roof of the present bath hall in the rear of the building will be raised to the line of the main roof and a new second floor cut in above the bath hall. The floor construction in this part of the work will be of reinforced concrete. A new porch will be added to the front of the building and the entire interior will be refinished, all as substantially described in the plans and specifications submitted.

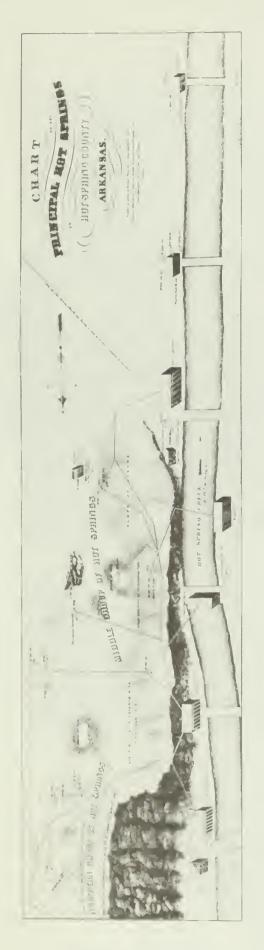
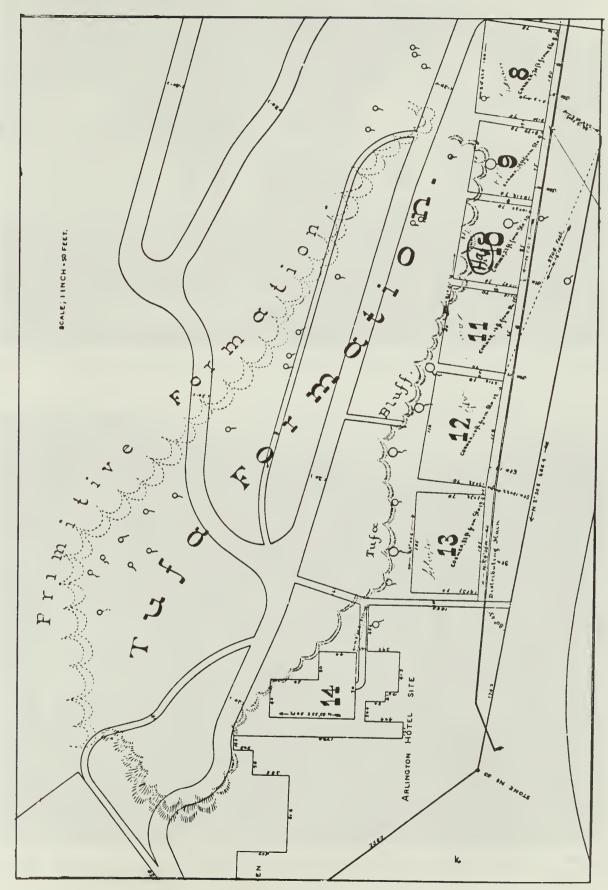


Chart of the Principal Hot Springs, 1860 (Source: Hot Springs National Park) Figure 6:



Hot Springs National Park) (Source: North end of Bathhouse Row, 1891 Figure 7:



Figure 8: Hale Bathhouse after the Civil War, date unknown (Source: Hot Springs National Park)



Figure 9: "Old Hale" Bathhouse, ca. 1891 (Qn far right, with Alum Spring in front; view looking northeast. Source: Hot Springs National Park)



Figure 10: Hale Bathhouse, 1892-1893. (The Alum Spring Pavilion is on the far left. Source: Hot Springs National Park)

There will be installed 19 baths for men and nine baths for women, two of the latter being placed upon the first floor for the convenience of the old and decrepid. The system of ventilation and heating is that generally known as the hot blast system: Fresh air will be drawn into the building by means of a fan of sufficient size to change the air in the building every 15 minutes. . . . The cost of construction is approximately \$50,000.00.

The remodeling proposal was approved in December 1913 and construction began in April 1914 (see figures 11, 12, and 13). A number of changes to the plans were made during construction which was completed in December 1914 (see figures 14 and 15).

Another extensive remodeling project was completed on the Hale in 1939 which included interior modifications and alteration of the exterior to the present Spanish Revival style (see figures 16 and 17).

In 1973, the National Park Service contracted with a private architecture and engineering firm to assess the physical condition of all the bathhouses on Bathhouse Row and to make recommendations concerning their preservation. The resulting historic structures report by Cromwell, Neyland, Truemper, Millet and Gatchell, Inc., was completed in November, 1973 (the Cromwell report), and describes the condition of each bathhouse at that time. A summary of the Cromwell report's findings for the Hale is included in the Appendix.

The Hale ceased operation as a bathhouse in 1978 and was remodeled as a theater in 1981, but it closed that same year after operating for several months. The 1914, 1939, and 1981 remodeling projects and a number of other minor remodeling and maintenance actions performed on the Hale until its 1981 closing are described in Table 1. Remodeling and Maintenance. Since the Hale closed in 1981, the National Park Service has repaired the roof at a cost of \$5,000; repairs to rain gutters and interior plaster are planned for 1986 at an estimated cost of \$17,500.

The listing in the table is based primarily upon the Superintendent's Reports and correspondence between the bathhouse lessee and the superintendent. The table also indicates whether projects were proposed (by the bathhouse lessee), approved or recommended (by the National Park Service); or known to have been completed. In most cases, the date used refers to the correspondence or report which described the proposal or project. Drawing numbers refer to the microfilmed documents on file at the park and the Technical Information Center at the NPS Denver Service Center.



Figure 11: The Exterior of the Hale during Remodeling, 1914 (Source: National Archives, Natural Resources Division, R.G. 79)



Figure 12: The Interior of the Hale during Remodeling (Men's Bath Hall), 1914 (Source: National Archives, Natural Resources Division, R.G. 79)



Figure 13: The Interior of the Hale during Remodeling (Office and Sunroom), 1914 (Source: National Archives, Natural Resources Division, R.G. 79)



Figure 14: Hale Bathhouse after 1914, date unknown (Source: Hot Springs National Park)



Figure 15: Hale Bathhouse, between 1915 and 1937 (Source: Hot Springs National Park)



Figure 16: The Hale after Remodeling, 1939-1940 (Source: Hot Springs National Park)



Figure 17: Hale Bathhouse, after 1940 (Source: Hot Springs National Park)

| AND MAINTENANCE |
|-----------------|
| REMODELING / |
| - |
| TABLE |

| DATE | STATUS | DESCRIPTION OF ACTION/RESULTS | IMPACT ON STRUCTURE | FIGURE/ DRAWING # |
|------------------|--------------------------|---|--|--|
| 1892-1893 | Original construction | | | 128/60085, 128/60165, sheets 1-3 |
| November 5, 1910 | Recommended | Remodel or rebuild the Hale Bathhouse | Changes proposed were mostly cosmetic | 128/60168, 128/60104 |
| 1911-1913 | Proposed | Several sets of drawings were done by George R. Mann for remodeling the Hale. It was proposed to extend the building 20 feet to the south, add a front porch on the west, and extend the first and second floors to the rear (east) some 50 feet. The Department objected, insisting that the front elevation match the other bathhouses, e.g. be three stories in height. | | 128/60165, 128/60165 |
| 1914 | Completed | Remodeled. Cost overruns forced reduction of number of tubs and elimination of hydro-therapeutic rooms. Women's bathhall was moved from second to first floor, and reinforced floor eliminated. Extensive heating and ventilating systems plus plumbing cost \$25,000. (Comparison of figures 9 and 13 indicates that the main portion of the front facade dates to the 1890s.) The building now had a 24 tub capacity, contained ca. 12,007 square feet, and cost about \$75,000 to build. It contained a sun parlor for lady guests, women's parlor, lounging room, with similar appointments for men plus additional facilities for smoking and reading. | Major structural changes to interior; addition to facade | 128/60103 and specifications; George R. Mann and Eugene J. Stern, Architects, Little Rock. |
| 1915 | Completed (?) | Installed cooling tanks | | |
| April 17, 1915 | Completed | Water from Superior Spring disconnected from Hale cooling tanks, rerouted to reservoir. | | |
| October 1915 | Completed | Additional cooling tank installed behind the Hale, necessitating excavation into the tufa. | | |
| April 1917 | Completed | Small white-tiled room built around the Old Hale Spring (no. 25) in the basement. | Major addition | Figure 18 |
| April 1918 | Completed | Entrance of the hot cave was closed up, probably with brick, and plastered over with cement mortar. | Major change | |
| 1917-1918 | Completed | Exterior steps built into the basement on the west side facing the Superior Bathhouse to allow visitors access to the basement spring | Major addition | Figure 19 |
| 1930 | Proposed | Remodel interior windows, build men's toilet extension to the rear, extend sun room (front porch), and redecorate exterior. | | |

| DATE | STATUS | DESCRIPTION OF ACTION/RESULTS | IMPACT ON STRUCTURE | FIGURE/ DRAWING # |
|------------------|-----------|--|--|------------------------------|
| 1930-1939 | Proposed | Remodeling. Various proposals done by Sanders, Thompson, and Ginocchio of Little Rock. | | 128/60102 |
| 1937 | Approved | Plans to remodel approved with stipulation that adequate attendant's quarters/bathroom be provided in basement, and existing spring be closed by a door. | | 128/60101 |
| 1937-1938 | Completed | Interior remodeling (bathhouse extension, new toilets and storeroom). | | |
| 1938-1939 | Completed | Exterior remodeling (new front and porch, complete new roof). Sanders and Ginocchio. | Major addition to front facade, interior changes | 128/60101 and specifications |
| April 1942 | Approved | Change cooling system, remove one large steel tank, remove top of cooling tank and construct baffle boards. | | Figure 20 |
| July 1945 | Completed | Stairway to basement and display spring tiled; exterior woodwork painted. | | |
| 1945 | Completed | Ventilator installed in women's dressing room. | | |
| 1947 | Completed | New basement door. | | |
| March 1956 | Completed | Rehabilitated basement by removing old and antiquated equipment and pipelines, and repairing electrical circuits. | | |
| April 1956 | Completed | Rehabilitated basement following flood. | | |
| April 1957 | Completed | Concrete walk, and former entryway to spring no. 29 eliminated. | | |
| 1956-1957 | Completed | Spring in basement covered over with $\frac{1}{2}$ " plate glass and concrete bricks. | | |
| 1958 | Completed | Rehabilitated for lease renewal. | Mainly cosmetic changes | |
| November 6, 1962 | Completed | Stainless steel tubs installed as replacements. | | |
| September 1965 | Approved | Install four new whirlpool units. | | |
| February 1966 | Proposed | Install new awning | | |
| February 1970 | Completed | New attic wiring | | |
| January 1974 | Completed | Plastered and painted. | | |
| October 1978 | Completed | Ceased operations. | | |
| Spring 1981 | Completed | Remodeled and reopened as the Eye and Ear Company Theatre. Work included installation of new emergency exit. | | |
| September 1981 | Completed | Closed | | |



Figure 18: Old Hale Spring, 1917 (Source: Hot Springs National Park)



Figure 19. Basement Entrance, 1917-1918 (Source: National Archives, Natural Resources Division, R.G. 79)

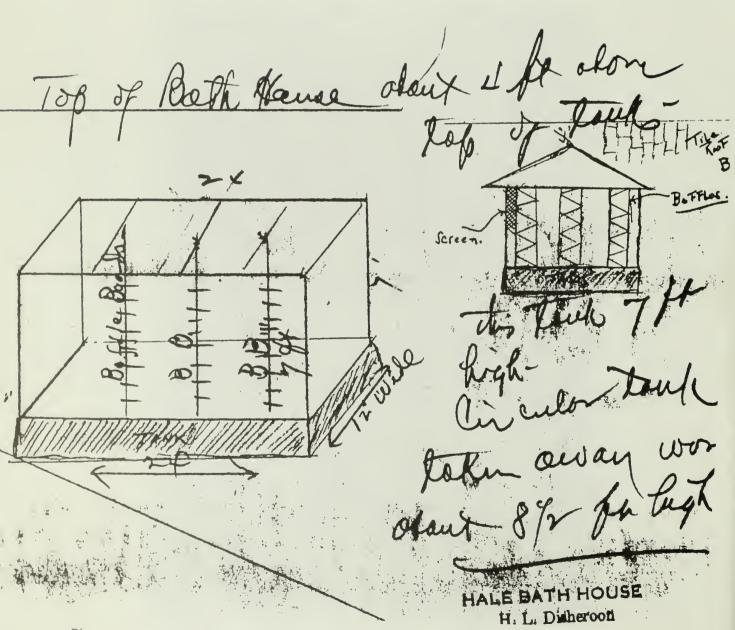


Figure 20: Changes in Cooling System, 1942 (Source: Hot Springs National

SIGNIFICANCE

The significance of the Hale Bathhouse is based on several factors. The primary significance is related to the overall significance of the Bathhouse Row area. The entire group of structures comprises one of the few collections of historic bathhouses remaining in the United States. Together with the setting of formally landscaped grounds, Bathhouse Row provides a picturesque reminder of America's interest in hot water spas, leisure, and recreation.

The Hale name comes from a long line of bathhouses, the first built by John C. Hale in the 1840s. Hale was an early pioneer and one of the three original claimants to the land encompassing the hot springs. The Hale was probably the first nineteenth-century Hot Springs bathhouse to provide more than the essential conveniences for the bather, establishing a tradition of services and appointments which reached its zenith in the early 1900s.

The Hale is the only bathhouse on the Row to retain more than traces of the original structural fabric from the 1800s. From correspondence and photographs it can be determined that a significant amount of the original 1892-1893 structure remains, including facades, foundations, marble floors, and the unusual metal and brick arches which support the first floor. Since the 1892-1893 structure represented the height of Victorian bathing comfort, convenience, and technology, structural elements related to this period are significant in their own right.

Apparently, the front, wood-frame portion of the second floor was not replaced during the 1914 remodeling, so some of the ceiling moldings in the first floor entrance rooms have been retained. Most of these moldings were covered over or removed in 1937.

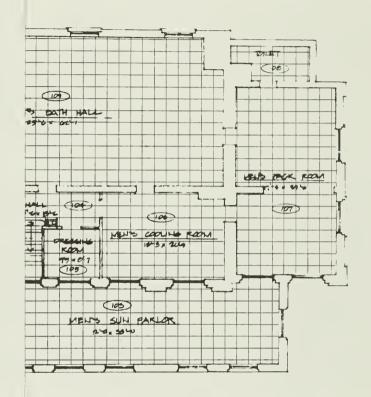
There was a great deal of controversy in the 1930s over remodeling the "old-fashioned" round-topped windows. In the end, the owners were allowed to retain this remnant from the 1890s. These windows are evocative of the 1870s Hale window design, providing a continuity of design from that time.

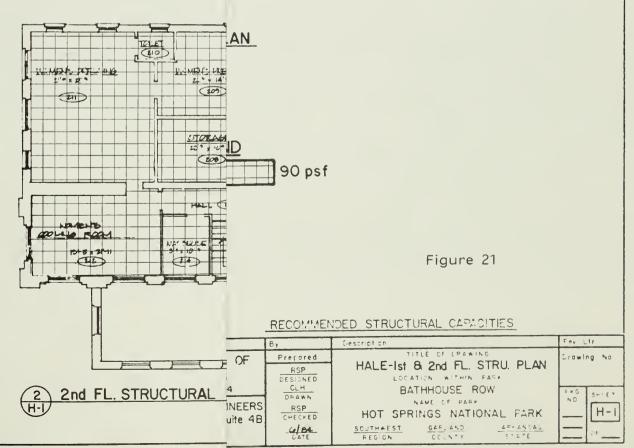
Unlike many historic buildings, the Hale's structural modifications related to the function and purpose of the bathhouse, and represent the evolution of the industry, its technology, and contemporary social mores. As such, the remodeled areas are also an integral part of the overall historical significance of both the structure and the historic district.

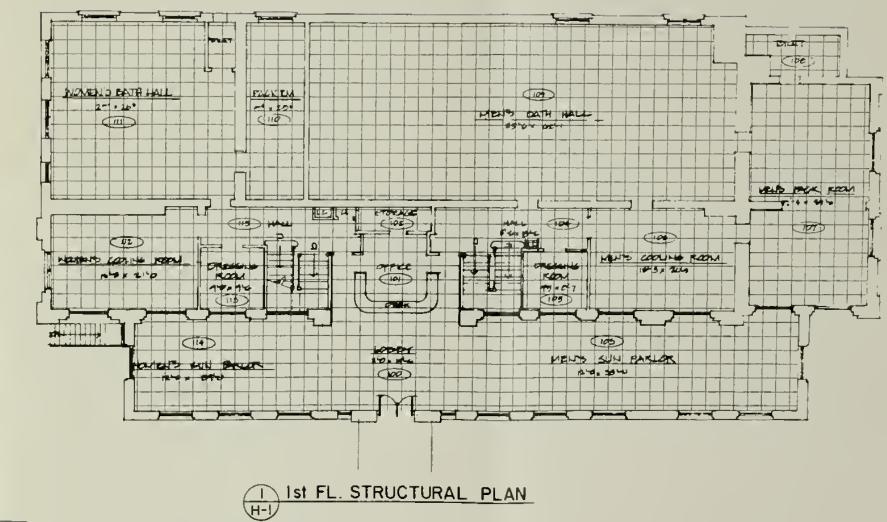
The Hale cave, first used in the nineteenth century for bathing, was converted to an "electric hot cave," by the turn of the century. This cave was probably used like a sauna. It was closed in 1911, and the entry door locked and covered over with mortar sometime before 1918, effectively preserving it untouched. Both the "cave" and the tiled spring room represent an important part of the historical evolution of the early day bathing industry. In addition, the white-tiled spring room is a classic example of the early twentieth-century bathhouse display spring, built so visitors could view a "natural" hot spring, and obtain hot drinking water.

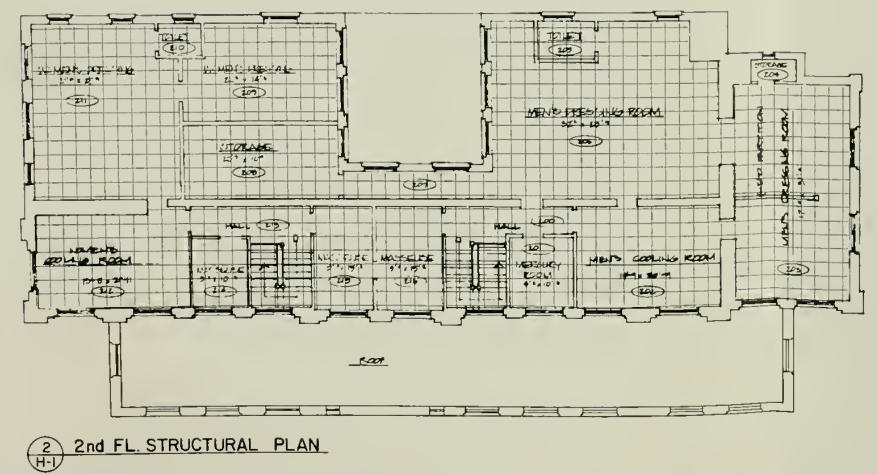
Testing for spring water on the Hale site in 1891 revealed a series of earlier foundations and hollowed-out areas in the tufa. These depressions had been used for bathing early in the century. The foundations and tufa areas form a part of the many extant archeological resources contained in the fill beneath the bathhouse.

Although overshadowed by the architecture of the Fordyce and Maurice Bathhouses, the Hale is a well-built example of a period bathhouse. The National Register form for the historic district indicates that the Hale is simple in design, but the adroit use of the upper and lower arcades to tie the design together is noteworthy. Examples of typical, distinguishing historical features, such as marble floors and light fixtures, and spaces, such as the office and sun parlors, are depicted on the bathhouse floor plans (figures 4 and 5).









LEGEND 90 psf

Little Rock, Arkansas

Figure 21

GAF_AND CCCSTY

512 E

H-1

RECOMMENDED STRUCTURAL CAPACITIES

SCUTHWEST REGION

| Revision Date | Ву | Descript on |
|---|-----------------|-------------------------------|
| INVESTIGATIVE STUDY OF | Prefored | HALE-IST & 2nd FL, STRU. PLAN |
| FIVE BATHHOUSES | RSP DESIGNED | LOCATION WITHIN PAGE |
| CONTRACT NO CX702930004 | DRAWN | BATHHOUSE ROW |
| PITTS & ASSOCIATES ENGINEERS 100 N Rodney Parham Rd Suite 4B | RSP CHECKED | HOT SPRINGS NATIONAL FARK |
| TIOO IN LOGUES EQUITOR HE SUITE AR | | · · · · · · · |

CATE

SCALE: 1/16"-1-0

EXISTING CONDITIONS

Two recent assessments have been made of the existing condition of the Hale Bathhouse. The National Park Service contracted with a private engineering firm in 1983 to conduct a study of the physical condition of the five bathhouses vacant at that time. The "Investigative Study of Five Bathhouses" (June, 1984) by Pitts & Associates Engineers, P.A., (the Pitts Report) focused on the structural condition of the bathhouses, but also provides some information on the condition of architectural materials and a comparison with conditions reported in the 1973 Cromwell report. The structural capacities recommended in the Pitts Report for the Hale Bathhouse are depicted on figure 21. Engineering drawings showing structural systems and details at 1/4 scale are available at the park. The appendix contains excerpts from the Pitts report which describe existing conditions at the Hale Bathhouse in three parts:

- 1. Inherent Structural Deficiencies These conditions are primarily caused by poor design or construction practices. They probably occurred early in the life of the buildings and have not changed much since. The environment may be a contributing factor.
- 2. Environmentally Caused Conditions These conditions are primarily caused by poor maintenance, lack of use, age and the normal wearing of the elements on the buildings. These conditions are continuing to deteriorate. Poor design or construction practices may be a contributing factor.
- 3. Comparison of Conditions Reported in the 1973 Historic Structures Report to the Conditions Observed in this Investigative Study of Five Bathhouses.

During the summer of 1984, a team of architects from the Historic American Buildings Survey (HABS) completed a documentation project for the vacant bathhouses which included elevation drawings (figures 1 and 2), photographs (figure 3), and a survey of conditions for the park's list of classified structures. The survey of the Hale Bathhouse is summarized in Table 2. Existing Conditions.

TABLE 2. EXISTING CONDITIONS SYSTEM/ELEMENT MATERIAL/TYPE DESCRIPTION/CONDITION Exterior Roof Red clay tiles on roof and porch. There are some cracked and broken tiles. Galvanized metal; generally in good condition but some paint has worn off. Flashing Two metal ducts on flat portions of roof; good condition. Stucco on brick Chimneys and vents chimney and vent house on rear of roof. In good condition except for some cracking on chimney cap. Roof slopes to gutters; flat portion of roof drains to slope well. Gutter Drainage clogged in many places. Rusted through in some areas. No evidence of any standing water on roof. Skylight drained by scuppers. Walls Stucco covered brick; in very good condition but with minute cracks over arches of porch. Could be finish only. Windows Wooden framed arched windows, and casement windows on porch. On second floor combination casement and double-hung. Other windows on first floor are rectangular double-hung with wooden frames. All frames are in good condition, but are frozen shut. Main door is finished wood with glass and brass fixtures. It is in fine Doors condition. Side door on porch is of painted wood with glass panes. Good condition except for rotting base. Basement door is in the same general condition, but is also lacking the door knob, and has a broken pane. Foundation See basement description. Site drainage Only slightly sloped to the northwest; no apparent problems. Gutters drain into ground pipes. Site Features/steps/ Sidewalk ramps up to main entrance and the side door. Hairline crack on walks/paths side door ramp. Also ramp, stairs lead down to the basement door. Electrical Lamps to the side of the main door. Are in good condition, no rust. Other HVAC units on south side of building, apparently new. Interior Basement Ceilings Concrete except for fan room which has brick vaulting between steel beams. Steel has rusted. Most are plastered over except on the display spring which is tile, along Walls with the surrounding corners. Some tile is missing around display spring, and plaster has been chipped away in many areas, especially corners. Hallways are half tiled. The west wall is constructed of hollow ceramic tiles. An older foundation further back is made of stone. These walls are in good condition with no cracking.

Doors

N/A

Electrical

Incandescent light bulbs; apparently in good order.

Heating/Cooling/Air Circulation

Large painted metal ducts in hallway. No signs of rust; good condition. (Area is too low to stand upright.)

SYSTEM/ELEMENT MATERIAL/TYPE DESCRIPTION/CONDITION

Plumbing Pipes in back rooms; recently painted.

Concrete. At display spring they are tiled. No cracks or signs of Floors

puddling; large section of tiles missing at spring area.

Other Large store of civil defense supplies in fan room.

First Floor

Ceilings Painted plaster; suspended accoustical tile in men's cooling room. Plaster

is peeling; worst in bathing rooms. Plaster has come off the steel beam in

the men's bathhall.

Ceiling has been removed in the northern portion of the men's bathhall due

to recent remodeling and conversion of a portion of the Hale into a public

multimedia auditorium and related facilities.

Walls Painted plaster. In the lobby, around desk ARE marble and wallpaper.

Severe peeling in bathhalls. Men's and ladies' bathhalls are tiled up to approximately 5 feet. Walls in men's bathhall are covered with curtains.

Doors Various; non-painted wood, wood and glass, painted wood (into dressing

room).

Electrical Storm lanterns hung in lobby chandeliers over desk and in hall.

Incandescent light fixtures everywhere else except for bathrooms. Fuses are in room to rear of desk. All are in good condition; fixtures appear to

be new.

Heating/cooling/air

circulation

Foil-wrapped vents in hallway behind desk; insulation is new.

Plumbina Tubs and sitz baths are in place in the ladies' bathhall. New restrooms

have been installed in the southwest corner of the building. Recent conversion. All th etubs are serviceable but require some maintenance.

Floors Lobby: Terrazzo, in good condition. Dressing rooms and storage have marble flooring; some loose blocks. The rest of the floors are covered

with small hexagonal tiles. Some cracking in parallel lines in the men's

bathhing hall and in women's bathing hall.

Other Brass railing along west wall of lobby. Intricate wood carving above door

to men's cooling room. Windows in women's bathhall need work; rotting

wood.

Second Floor

Ceilings Painted plaster. Storage room, exposed wooden roof. Paint peeling,

plaster coming off in ladies' dressing room and to a lesser degree

everywhere else.

Walls Bathrooms have half tile; the rest of the wall is painted plaster in good

shape but paint is peeling.

Storage room is painted brick.

Doors All unpainted wood. Several are off hinges (by reading room).

Electrical Incandescent overhead fixtures except fluorescent in hallway and women's

cooling room. Several fluorescent fixtures and bulbs are stored in men's

dressing room.

Heating/cooling/air Every room has a ceiling vent heated by a steam radiator. Register torn circulation

off wall in women's cooling room.

Plumbing Toilets still in place. Men's cooling room has various plumbing. Pipes in

storage. Pipes look new.

Floors All linoleum tile except the south stairs which are concrete. Several tiles

have delaminated from the hardwood floor beneath.

Other Stalls in dressing rooms need refinishing but their metal is unrusted.

APPENDIX

EXCERPTS ON THE EXISTING CONDITION OF THE HALE BATHHOUSE FROM THE 1984 PITTS REPORT

Page 7:

The primary purpose of this section is to report on the structural condition of the bathhouses. Many of the structural and architectural building components serve both functions or are so soundly bonded together that it is difficult to report on the structural aspect without referring to the architectural materials. In addition, structural deficiencies and adverse environmental conditions that affect the structure first manifest themselves as blemishes on architectural finishes. Therefore we must report on the condition of and the conditions affecting some architectural surfaces to convey a comprehensive report.

One problem is common to all of the bathhouses. It is best to define this problem and provide a term that will identify it so that it will not have to be repeated for each bathhouse. All building materials contract and expand with variations in temperature. These various building materials contract and expand relative to the temperature variations throughout the building and with the coefficient of linear thermal expansion of the materials. With the exception of metals, many building materials tend to expand with increases in moisture content or contract with losses of Portland cement products, such as concrete, concrete block masonry and portland cement plasters and mortars are reversible and will shrink or swell with changes in water content. Portland cement concrete will also experience non-reversible shrinkage during hydration. clay products such as brick, structural tile, glazed tile and terra cotta expand slowly upon contact with water or humid air. This expansion is not reversible by drying at atmospheric temperatures. The architects for these buildings did not provide contraction joints to compensate for these differential movements. The brick masonry exterior walls have expanded because of the heat of the sun and the absorption of water. The interior floor slabs have contracted because of hydration, desiccation and the relative cool atmosphere. This places the walls in compression and the slabs in tension. The thick brick walls being strong in compression and the relatively thin concrete slabs being weak in tension cause the concrete to crack. We will call these cracks stress-relief cracks.

Another phenomenon that causes stress-relief cracks is concrete curling. When concrete floor and roof slabs are poured directly on masonry walls, curling of the slab often occurs due to shrinkage, deflection, and plastic flow of the concrete. If the slab warps, it may rupture the masonry or crack the slab, particularly at the corners. Horizontal cracks in the masonry often occur below the slabs.

Pages 11 and 12:

No structural deficiencies were observed in the Hale bathhouse. The architectural finishes are in fair condition. Deterioration due to uncontrolled temperature and humidity is occurring in some areas.

Serious plaster deterioration was observed in the men's dressing room (206), in masseuse (216) and in the men's sun parlor (103). This damage was caused by a faulty roof ventilator, by rain blowing in an attic wall vent and by a downspout or gutter overflowing, respectively. The attic is dry and no signs of roof leaks or related rot were observed. The roof gutters are showing early signs of deterioration. The basement is dry. The display hot spring is well contained and the water table elevation is below that of the basement floor.

Other than the general deterioration of painted surfaces and the plaster damage specifically mentioned above, I did not observe any conditions that are worse than reported in the 1973 Historic Structures Report. The 1973 Historic Structures Report observed that the first floor beams were exposed and badly rusted. The bottom flange is exposed and there is some rusting. We did not observe any scaling or oxidation laminations that will pose serious problems. The 1973 Report stipulates that the eastern portion of the second floor structure is concrete beam and flat slab construction. This is not the case. It is constructed of steel girders and wood floor joists.

SELECTED REFERENCES

- NATIONAL PARK SERVICE, U.S. DEPARTMENT OF THE INTERIOR
 1973 "Historic Structures Report, Hot Springs National Park," by
 Cromwell, Neyland, Truemper, Millett and Gatchell, Inc.,
 Little Rock, AR. On file at Hot Springs National Park.
 - "Interim Report, Phase Two, Testing on Site: Investigative Study of Five Bathhouses," by Pitts and Associates Engineers, P.A., and Witsell and Evans, Architects-Planners, Little Rock, AR. On file at Hot Springs National Park.
 - 1985 General Management Plan Amendment/Development Concept Plan/Environmental Assessment, Hot Springs National Park, Garland County, Arkansas. Denver, CO: Denver Service Center.
 - 1985 "Historic Grounds and Structures: An Interim Report on Bathhouse Row," by Diane Rhodes, Denver Service Center, Denver, CO. On file at Hot Springs National Park.

LIST OF PREPARERS/CONSULTANTS

PREPARERS

Roger Brown, Project Coordinator, Denver Service Center (DSC)

Thomas McGrath, Historical Architect, DSC

Diane Rhodes, Researcher, DSC

Summer 1984 Recording Team, Historic American Buildings Survey (HABS), under the direction of Kenneth L. Anderson, Principal Architect

CONSULTANTS

Earl Adams, Chief, Division of Interpretation, Hot Springs National Park

Tony Crosby, Historical Architect, DSC

Diane Jung, Survey Historian, Division of History, Southwest Regional Office (SWRO)

Wilson Stiles, Architectural Historian/Arkansas State Historic Preservation
Officer

Barry Sulam, Regional Historical Architect, Division of Conservation, SWRO

Marlys Bush Thurber, Historical Architect, Division of Conservation, SWRO

George Thorson, Project Manager for Historical Architecture, DSC

Julie Vosmik, Architectural Historian, Arkansas Historic Preservation Program

Melody Webb, Chief, Division of History, SWRO



| | DATE | DUE | |
|-------------------|------|-----|--|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Demco, Inc 38-293 | 3 | | |

As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

Publication services were provided by the graphics staff of the Denver Service Center. NPS D-44 July 1985

